ABSTRACT

A method of authenticating a security device to determine if it is authorized to be used with a security system. First and second encryption keys are stored in the control panel and the security device. A challenge message is produced by encrypting, with the first key, a challenge index (such as a random number generated by the control panel). The challenge message is transmitted the security device, where the encrypted challenge index is extracted from the challenge message and then decrypted using the first key at the security device to produce a response index. A response message is produced by encrypting, with the second key, the response index decrypted by the security device. The response message is transmitted to the control panel, and the encrypted response index is extracted and then decrypted using the second key at the control panel to produce the response index. The control panel then compares the response index with the challenge index previously generated. If they are the same, then the control panel indicates that the security device is authentic and allows further communications between the control panel and the security device. If they are not the same, then the control panel indicates that the security device is not authentic and disallows further communications between the control panel and the security device.